

MASSACHUSETTS PLOUGHMAN



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MASSACHUSETTS PLOUGHMAN
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All persons sending contributions to THE PLOUGHMAN for use in its columns must sign their name, not necessarily for publication, but as a guarantee that the same will not be consigned to the waste-basket. All matter intended for publication should be written on size paper, with ink, unless but one side.

Correspondents, particularly farmers, giving the results of their experience, is solicited. Letters should be signed with the writer's real name, in full, which will be printed or not, as the editor may direct.

THE PLOUGHMAN offers great advantages to advertisers. Its circulation is large and among the most active and intelligent portion of the community.

Rates of Advertising: 12 1-2 cents per line for first insertion. 6 1-4 cents for each subsequent insertion.

AGRICULTURAL.

COARSE meadow hay wrapped about tender shrubs will protect from winter-killing.

The handiest way to keep record of a new orchard is to make a little map of it with the trees all marked, numbered and named.

WHEN evergreen trees get rusty on the lower branches, cutting out the leader will cause the lower part of the tree to regain its vigor and green appearance.

DEAD branches and suckers may be cut away from the fruit trees at this season. The branches should be cut off close to the trunk clear back to the live wood.

The freezing and thawing climate of this section is particularly trying to berry plants. They are liable to be lifted out of the ground unless protected by mulch.

New shoots of the grapevine layered or partly covered with earth in the spring, will take root and may be cut away and transplanted in the fall. This is the quickest way to grow new vines.

Fertility in Bran and Straw.

Examination of mill products at the Arkansas station showed that of \$15 worth of fertilizers taken from the soil by one hundred bushels of wheat, nearly \$13 worth went into the bran, ship-stuff and other offal used for stock feed. If farmers have their wheat ground on the toll plan and receive back these products and feed them upon the farm, most of these fertilizing elements will be recovered in the manure, and if this be saved and applied, wheat growing need not severely tax the fertility of the farm.

Attention is also called to the fact that the straw of one hundred bushels of wheat contains some \$9 worth of fertilizing ingredients, and hence this should always be fed upon the farm or used for bedding, mulching, or otherwise rotted down and applied to the land. Thus applied to the soil, it would be worth almost as much in the way of humus as the value of its manurial elements.

Self-Milking Cow.

To prevent a cow from milking herself, a "cradle" similar to that put on horses to prevent them interfering with a recently blistered surface, answers very well in the way of limiting the turning of the head to either side. It may be made of round sticks of about the calibre of broom handles cut to a length sufficient to reach from the under jaw to the shoulder, but not so long as to interfere with the lowering of the head for the purpose of grazing. Holes should be bored through each end of the sticks, and a strong cord passed through them, alternating each stick with two cotton reels or spools so as to keep them from running together. The "cradle" having been put round the neck so that the jaws come between two sticks, it should be fastened securely over the crest.

Incidentally, the discussion took up the question of the value of night soil. Some thought it worthless while others considered it good for certain rank feeding crops like rhubarb. After some further discussion the meeting was dismissed until the first Saturday of next month.

when sucking is attempted. Horseshoe nails driven through the nose-band so that the points protrude, and kept in position by a lining of leather, answer the purpose very well.

The Market Gardeners.
QUESTION BOX ON MANURE AND FARM FERTILITY.

Saturday afternoon the Boston Market Gardeners held their first general meeting of the season at the large hall in Quincy Market building. At a business meeting held previously, the former officers of the society had been re-elected. President W. W. Rawson occupied the chair and the program included the discussion of various practical questions.

Somebody inquired, Should farmers and market gardeners pay more for manure in the city than the expense of hauling it?

Mr. Sullivan—Increasing competition has reduced profits and made it uncertain how the gardener can pay his bills. It was said that the use of electric cars would reduce the number of horses, but such has not been the case. Is it not time to insist upon securing the manure for the hauling? Three-fourths of the manure I use is had for the hauling.

Mr. Bliss—In Pawtucket we pay \$4 per cord.

Mr. Hartwell, of Lincoln—We haul a great deal of manure from the city and shall continue so long as our crops pay for it.

In order to keep well, as stated by a bulletin of Purdue, Ind., station, apples must be picked at the proper time. Care must be exercised in handling to prevent bruises, carefully assorting the ripe from the unripe, the perfect from the imperfect, and storing in a cool, dry place, with plenty of pure air, free from all odors of decaying vegetables or other substances.

The average fruit grower does not exercise enough caution in handling and assorting his fruit.

The degree of maturity will have much to do with the keeping qualities. A late fall or winter apple should be mature, but not ripe, when it is picked, if it is expected to be kept for any considerable time. The process of ripening is only the first stage of decay, and if this is allowed to continue before picking till the apple is ripe or mellow, this breaking-down process has proceeded so far that it is a difficult matter to arrest it. As soon, therefore, as the stem will separate freely from its union with the branch, the apple is sufficiently mature for storing.

Chairman Rawson—We cannot get manure for nothing, because there are companies that will take every stable in Boston at \$1 per load. Possibly they would unite with us and get it free; but there are many stables better worth \$1 per load than others are worth the hauling.

Mr. A. H. Ward of Boston—I am surprised that farmers should haul manure at a greater cost for hauling than manure could be made for at home. Muck from a peat swamp, properly composted, is worth more than city manure. Compost it with potash or soda.

This statement of Mr. Ward's led to a lively discussion upon the merits of the proper temperature for keeping apples in as nearly thirty-five degrees Fahr. as it is possible to keep it, and in order to maintain this, it will often be necessary, in this climate, to provide a separate place for storing the fruit, as the average cellar under the dwelling house is wholly unfit for this purpose. If the cellar consists of several departments, so that one can be shut off completely from the others, and the temperature in this kept below forty degrees, it will answer the purpose very well. If this cannot be done, a cheap storage house may be built in connection with the ice house, by building a room underneath, having it surrounded with ice on the sides and overhead, with facilities for drainage underneath, keeping the air dry by means of chloride of lime placed on the floor in an open, water-tight vessel, such as a large milk crock or pan. In this way the temperature may be kept very near the freezing point the year round, and apples may be kept almost indefinitely.—James Troop.

Raising Hogs in Barn Cellar.

One of our subscribers from Mechanicsville, Conn., wishes some information in regard to raising hogs in basement of barn. We answer in a general way, as particulars are not at hand.

The basement of a barn is not a bad place for hogs, provided that they have a dry place to sleep in, and a clean place to eat in, and provided, also, that the manure is not allowed to pile up so as to heat much. Hogs like to burrow in hot manure in cold weather; and when they come out steaming hot into the cold air they are apt to take cold and often die of pneumonia. The remedy is to spread the manure so that it will not heat much.

More Cows to the Acre.

Make ensilage a prominent cattle feed. It can be secured in good condition at the harvest without regard to the weather. It thus furnishes a green food or nearly so. By its daily use, the farmer is enabled to keep more cows to the acre. Thus it will be seen readily that the number of cows need not necessarily be limited to the capacity of the pasture.

By partial soiling, the dairyman is enabled to keep more stock.—George Flint, North Anson, Me.

Cream of the Bulletins.
EFFECT OF ELECTRICITY UPON HOOTHOUSE VEGETABLES.

F. W. Rane of the New Hampshire station recently gave an account of an experiment to test the effect of incandescent electric light upon hothouse vegetables. It was found that eight incandescent lights, sixteen candle power, running from five to eleven o'clock, six days a week, seems to have no effect upon cress, but to accelerate the growth of the other plants tested to the following distances from the lights: Cauliflower, twenty feet, Grand Rapids lettuce, nineteen feet, Rawson's Forcing-House lettuce, six feet six inches, and spinach, sixteen feet nine inches. The extra height of the plants was, however, at the expense of stockiness in the case of lettuce and cauliflower. Spinach is a plant which is greatly affected by the light. In one instance electric light for thirty nights resulted in a difference of twelve inches on the average.

KEEPING FALL AND WINTER APPLES.

In many localities there are often more apples grown than can be disposed of profitably at the time of gathering, and so serious loss to the growers is the result; much of this loss could be prevented by a proper handling of the fruit, and by providing a suitable place for storing until the congested state of the market is relieved.

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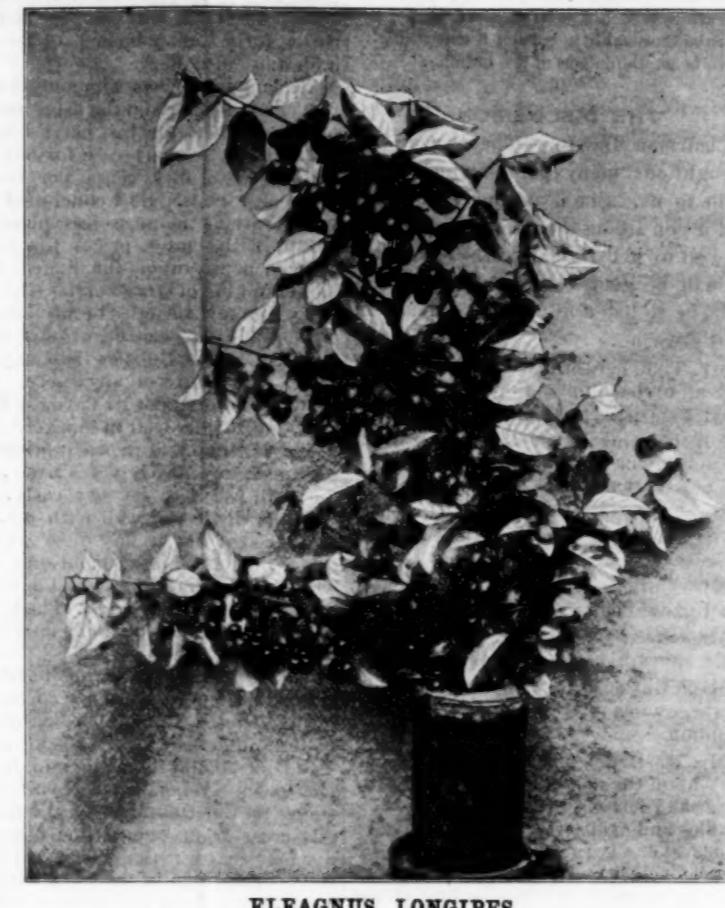
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ELEAGNUS LONGIPES.

Many barn cellars are not dry enough for the health of the hogs; it does them no harm to wallow in the wet, if they have a dry place to sleep in when they wish.

Another cause of disease in hogs is close, impure air: their quarters should be well ventilated, but their sleeping place should not be draughty.—ED.

Bismarck Apple.

Remarkable things are claimed for this variety, which is a recent introduction from New Zealand.

The introducers assert that it bears fruit on a one-year-graft, is of fine quality and color, of a dwarf habit of growth and very prolific. It is said to be suitable for a hot climate, yet entirely hardy. It is being introduced into this section by the Shady Hill Nursery Co. of Boston. The Bismarck is said to be excellent for table use or for cooking, and owing to its bearing fruit when only one or two years old, it has been grown in large quantities as a pot plant for table and greenhouse decoration.

ANOTHER NOVELTY.From Japan comes, and introduced by the same nursery company, a new fruit-bearing shrub, the *Eleagnus Longipes*, which has already attracted much attention. Its leaves are dark green and hang on well into the winter; the flowers are yellow, and the fruit ripens red in July.

It is very ornamental, colored red with small white dots. The fruit is juicy, pungent, and very agreeable to some, while others do not care much for it.

The plant is productive, hardy and easily grown. It is a desirable novelty for the home grounds.

Find New Markets.

Cow-keeping farmers—which most farmers are or ought to be—should, as a class, be constantly seeking new markets for their dairy products.

I do not mean by this that every farmer should do so, for many of them have satisfactory markets, and in such cases it will be wise to let well enough alone. Nor do I mean, by seeking new markets, that such markets must always be sought in distant localities. Many times markets can be found near home, and sometimes they can be created. Then, again, the adoption of an old or the invention of a new dairy product is equal to a new market.

From milk can be produced cheese in many varieties. If one decides to go into cheese-making, and has an idea of taking up anything different from the common kinds, it would be well to make a business of looking up the other and less common varieties. In some sections of the country there is a growing demand for limburger and brick cheese. A home demand for those kinds, or for one of them, would make a market for the product of one up to several dairies, according to size of city or village. This is a market that many cow keepers would do well to look into.

Another novelty.

Of course selling milk direct to consumers is always open to producers of it living near large cities and villages.

Selling skim-milk and cream can be made profitable by one or two milkmen near cities of, say, from five to ten thousand inhabitants. Hotels, restaurants, soda fountains and certain entertainments in society make good markets for the product of one up to several dairies, according to size of city or village.

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F. W. MOSELEY.

Clinton, Iowa.

Two Meals a Day.

"Little but often" is the motto that should be adopted by all swine growers in their treatment of the young pigs. At first five meals a day should be given.

As they grow older and stronger, their capacity will increase, and the number of meals may be gradually reduced until it gets down to two. Some farmers feed their pigs three times a day, but twice a day is quite sufficient. If fed at noon, the animals have only half digested their hearty breakfast, and the addition of more food checks digestion. With only two meals a day this trouble is avoided, and the appetite is keener.



THE BISMARCK APPLE.

THE PLOUGHMAN
Farmers' Meeting

Was held in Wesleyan Hall, 36 Bromfield Street, Boston, Mass., Dec. 12, 1896, at 10 o'clock A.M.

Essay by Miss Mary E. Cutler, of Holliston. Subject: "The Golden Side of Fruit Growing."

FARMERS' MEETING.

THE ESSAY.

(Continued from first page.)

we are totally ignorant of the origin of the vine. In some parts of Italy there are vineyards that have been in a flourishing condition for upwards of three centuries, whilst in the hedges of Italy and the woods of America the vine has been seen, luxuriant through its liberty, overtopping the highest elm and poplar trees.

Here in New England we have only a few places that are really practical for the raising of the grape.

We want to get an elevated location, as there we do not get the early or late frosts. The best position is a side hill, sloping to the southeast. Care should be taken in the selection of the soil. I have never seen a place so gravelly or sandy for the growth of the grapevine. A dry place just suits the vine. Pruning may be done any time after the leaves fall until April 1. After that time, vines will bleed more or less, which may or may not injure them; but certainly can do them no good. Just at present, the cultivation of the grape, like the apple, is under a cloud.

We are not realizing from them what we did a few years ago; the state of the money market, and over demand caused by innovations of large vineyards in New York State, are two of the causes.

The best and most profitable varieties that I know of to grow for the market in this locality is the Concord; then comes the Concord and Moore's Early.

In spite of the over-abundance, I would recommend grapes as a profitable and attractive industry.

No branch of horticulture offers more inducements than the growing of strawberries. Thriving more or less on any soil, in any place, from Newfoundland to California, the strawberry may be grown to great perfection in any part of our country or Canada.

It is the only fruit that ripens somewhere in the United States every day in the year. Their culture requires neither much land, expensive tools, much capital, nor much physical strength, and recommends itself at once to poor men who have small places, city men who long to break loose from the desk, old men, women, boys and girls—all, indeed, who like to till the soil, to watch the growth of plants, study their habits, supply their wants, and reap their fruits. Sure to grow, almost equally sure to sell at paying prices, exhausting neither to the land nor the grower, but leaving both richer than it found them.

It comes as a welcome visitor to the housewife, epicure and invalid, and grieves no one unless it be the doctor.

Many different localities have been noted for their fine berries; but in every instance this due to the person, and not to the place or climate.

They are commercially planted in early spring or late summer; only new plants, those less than one year old, should be used. Distance between plants varies, but rows four feet apart, with a distance of fifteen inches between the plants, requiring 872 plants per acre, may be taken as a fair average. What seems to be needed is better cultivation, better fertilization. Use the horse cultivaator more, and the hand hoe less, and you will reduce the cost of production.

Of the two systems of cultivation, the hill and matted row, it is unquestionably the fact that the former produces the largest and best fruit. Those who cultivate their strawberries but once a year have a hard time, but somehow no one plucks them. They are like the man who combs his hair but once a week and finds even that a difficult job. They are, however, engaged in a good cause, furnishing berries for that, large class who cannot afford to pay over five cents a quart. Job Billings once remarked that he had seen many articles on milk, but the best article he ever saw on milk was cream. The same is true when eating a dish of delicious strawberries.

Strawberries to weigh an ounce each, sixteen to the pound, is the result of recent "high art" in strawberry growing.

Many growers tell me that the prices for strawberries the past season were very satisfactory. They are planting more strawberries to buy more land, and are buying more land to plant more strawberries.

Their strong point is the lateness of their fruit, and their great inquiry is for the latest variety. I believe that strawberry culture, in the hands of good men, could be made to pay better than cows. I believe the very closest man in the world is the one who says he can't spend money for strawberry plants, thus preventing his family from enjoying one of the most delicious fruits God in his goodness has given us. The question is often asked me, "What are the best varieties of strawberries to grow?" This is difficult to answer, as the soil and climate and distance to market vary so much. What kinds return good profits to me may not succeed so well with you; but the all-round berries, early, medium and late, are Charles Downing, Babcock, Sharpless, Leader, and Miner's Early.

The currant during the hot summer weather is a most healthful and acceptable variety of fruit. Large, fine fruit and none other is wanted, nor will readily sell.

They want the best cultivation.

Fay's Prolific and the Cherry are both good varieties, and will produce large fruit if properly treated. Fay's new Prolific is rich red in color, as compared with the Cherry; it is equal in size, better in flavor, with much less acid, and is five times as prolific. While on account of its peculiar long stem, it is much more rapidly picked. Cutters five inches long, with fruit nearly as large as Delaware grapes, have been picked. This variety was grown from seed by the late Lincoln Fay of Portland, N. Y. It has been fruitfully tested by all the leading fruit growers East, and the testimony of its wonderful size, beauty and excellence is universal.

The blackberry is the most easily grown of the small fruits, and yet one that is grown more under neglect than any other. The kinds which are hardy, and give general satisfaction are the Snyder, Agawam, and Wachusett Thornless. The Snyder is the one great blackberry for market in the far North, as it is the most vigorous, hardy, productive and reliable of all, has never been known to winterkill, even the Northwest, with twenty-five to thirty degrees below zero; ripens medium to late.

The Wachusett is free from thorns, fruit of good size and fine flavor, continues bearing until September, wins high culture, and will not thrive on dry, thin soil and with the slowest culture so often given to the blackberry.

The Agawam stands at the head for hardiness, fruitfulness and sweetness.

Following the blackberries come the Raspberries. Red, yellow and black they require the same culture as the blackberries. Plow the ground deeply and well. Most people make the mistake of planting too closely. If planted in check rows, they should not be closer than 7x7 feet; this system admits of better culture by horse power at less cost.

But when a single row only is wanted for family use, plants may be set three feet apart. The hardy varieties, or nearly so, are the Cuthbert, Marlboro and Turner; of these the Cuthbert is the most vigorous, and more largely planted.

Gooseberries require much the same soil and treatment as currants. If planted in a partial shade they are much less likely to mildew, which is the one drawback to successful culture. The popular kinds before the public are Downing, Smiths', Improved and Industry.

A few words in regard to new fruits. In my list of varieties of fruits that we may make, we find that few if any of them are just what we would have them.

We have no perfect varieties; there are always some points wherein they might be improved, and great interest has been awakened in the production of new varieties. What we want is an early apple of large size, good color, and fine quality, and a late one of a large size and fine quality as the Gravenstein, with the color and productiveness of the Baldwin. We want a pear that will keep as late as October, of large size, good quality and color.

We want an early peach, of large size, a free stone of good quality, and more hardy than we have now. A plum, very early, of large size, good color, and of as good quality as the Green Gage.

We want a grape as early, vigorous and hardy as the Moore, of better quality, and one that will adhere to the stem, as well as the ion, and that can be kept until the holiday trade, outside of cold storage.

In the Blackberry we want a fruit as large as the Kittatinny or Wilson, and perfectly hardy. Is the raspberry a berry as large as the Cuthbert, as vigorous and productive; but ripening as early as the Hansel and Marlboro.

We want a strawberry of the quality and productiveness of the Sharpless or Jewel, and the productiveness of the Crescent or Wilson.

There is a good deal of pleasure in testing new varieties, but more disappointment, as nineteen out of twenty prove of less value than the old standard sorts. You farmers cannot afford to test new varieties, they should be tested at our Experiment Stations and Agricultural Colleges.

There is another kind of fruit, the Tomato, though properly it does not come under the head of tree or small fruit, not being hardy, but of animal growth, which may be of interest for you to know where this plant was first grown.

Mr. Thatcher—Do you believe in setting an orchard on old orchard ground?

Miss Cutler—I should prefer not to;

if the land is good and had been thoroughly cleared of roots and stumps,

the new orchard might do well.

Mr. Thatcher—I believe the Greening

variety of apple was not mentioned in the essay.

Miss Cutler—it is not a good keeper, but I grow it to some extent.

Mrs. Spear—What is the cause of a scaly appearance of the branches?

Miss Cutler—Probably a kind of blight, owing to dampness. It is quite common.

Mr. Hartwell—I wish I were able to look upon the golden side of fruit growing, but I haven't been able to this year.

Apples and grapes have both received a black eye. I raised 2000 bushels of Gravensteins, and I find quite a difference between fifty cents a bushel and \$1.50 to \$2.50, the usual price. It did not pay to store apples this season.

Some that I held for higher prices sold for twenty-five cents less, later.

Among grapes I find the Warden a nice kind, also Moore's Early.

The plant is well ripened from the vine.

He called for pepper, salt and vinegar, and to the astonishment and horror of his spectators ate the fruit with a relish. Having finished, he told them that this strange fruit was a tomato, or, translated into English, a love apple, and that it was wholesome and nutritious.

The seeds were, therefore, carefully preserved and distributed among friends and neighbors, who cultivated it as a curiosity; but it was long years before prejudice gave way to appetite, and this most popular vegetable came into general use.

Even now many people remember it as an ornamental rather than useful plant.

A few years since there was a scare arising from the doubtfully au-

thorized story that tomato produced cancers when eaten freely; but it was of the shortest duration, due to the lack of any proof of harmful results from its use, and to the common sense of consumers, who recognized in it one of the most useful vegetables.

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The seeds were, therefore, carefully preserved and distributed among friends and neighbors, who cultivated it as a curiosity; but it was long years before prejudice gave way to appetite, and this most popular vegetable came into general use.

Even now many people remember it as an ornamental rather than useful plant.

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POULTRY.



Keeping Too Many Fowls.

Farmers generally have too many fowls. If they kept less in numbers, and better in quality, it would mean less cost and better returns. Where a farmer will not erect large runs for poultry, or will not colonize them in stocks several acres apart, he should not keep over twenty-five in a flock. Twenty-five good hens in a flock will give better returns than one hundred.

CURVED BREASTS IN TURKEY BREEDING.

If a turkey cock which has a curved bone is used for breeding purposes, very often one-third, and sometimes half of the young birds will be similar. If a turkey cock has only a dent in the middle of his breast bone, and both ends are straight, it is not constitutional, but simply through going to perch too early. There are not so many birds sent to the markets with crooked breast bones as there were years ago, because people are now more careful about their stock birds.

DUST BOXES.

It is necessary to provide dust boxes for the fowls during the winter months if they are to be kept free from lice. If the soil in the yards is naturally dry and porous, abundant opportunities will be had for dust baths during the warm summer months, but during the late fall, winter, and early spring, some artificial provision must be made. A comparatively small box will answer the purpose if the attendant is willing to give a little attention to it each day. These boxes should be placed so that they will receive some sunshine on each bright day, and be kept well filled with loose, fine earth. Road dust, procured during the dry months from much-travelled roads, is best for this purpose. Probably there is no way in which the poultry man can better combat the body louse than by providing dust boxes for his fowls.

POULTRY ON THE FARM.
No one is better fitted for making poultry pay than the farmer. He can find no better market for cheap grain than poultry affords. But poultry on the farm must be commanded better. If the farmer is indifferent the hens become lazy—and lazy hens are as unprofitable as a lazy farm hand. While there is always plenty of work on a farm during the winter, the income is nothing else but what has been earned during the summer. Why not increase the winter earnings by building snug poultry houses, studying up the question of winter eggs and winter poultry, and devote your time to gradually building up an industry that each year will enable you to gradually drop the harder work of farming, and that, too, with an increased income? Farmers should think well over these things, for to them, more than to anyone else, it means money in their pockets.

WHAT IS WANTED IN TABLE POULTRY.
"In breeding poultry for the table," says Mr. B. W. Tegetmeier, "what is wanted is small bone, thinness of skin, and plump breasts, and to secure plump breasts we must have a bird that flies well. The Asiatic birds will not go over a three-foot fence, but the breast meat is deficient on the other hand, the Game bird will fly over a twelve-foot wall, which it could not do if it were not for the muscles in the breast. The plumage should be tight, and there should be as little as possible. To obtain such a bird, I advise the crossing of a Dorking hen (not the present show Dorking) with an old-fashioned Game cock; it could be found, or, failing that, with the Indian Game. The cross could be made the other way if desired, as the change only affects the color of the fowls. In France there is a notion that large combed fowls are good layers, but that small combed fowls are fattened more quickly. Another good and old cross is an ordinary Malay and Dorking."

TRUE TESTS FOR EGGS.

In testing an egg it is not enough to simply hold it up in front of the tester; it should be turned clear around and viewed from all sides. If the egg has been lying on its side for some time (a new nest) the yolk may come in contact with the shell and adhere thereto, thus becoming mouldy on that side only.

If we hold the egg up before the tester it will look clear unless that dark spot is turned so as to come between the eye and light. Such eggs are worthless, and yet often pass the tester as good. Three eggs can be taken at once in the right hand and passed to the left and turned while before the tester with the fingers of both hands. True, it takes a little longer, but it is the only sure way to do it.

With a little practice we can soon tell whether an egg is fresh or not while testing. The fresh egg is firm, with little or no air space, while the stale egg shows more air space and the contents are more or less as the egg is turned.

APIARY.

Bees and Color.

It has frequently been asserted that the brilliant colors of many flowers serve to attract bees and butterflies to them. Experiments recently reported to the Belgian Academy of Science seem to show that the perfume rather than the color of the flowers is the real attraction. Bright-colored blossoms were covered with leaves, and papers pinned closely over them, yet the insects not only visited the hidden flowers, but endeavored to force their way under the paper in order to reach the blossoms, which they could not see.

PROTECTION OF BEES IN WINTER.
If bees are kept in thin, unprotected hives during winter, the moisture arising from them will condense and freeze to the hive, thereby encircling the bees with ice. On a warm day this will melt and run down over them and dilute the honey, producing disease. Protect with chaff hives, thoroughly made with double walls and packed well with good dry chaff. A good dry cellar is equally good, but if bees are to be kept in a cellar they must have a department by themselves, where they are not subjected to disturbances of any kind.

BEES AND FRUIT.

The Beekeepers' Journal says that the Creator did not place the drop of nectar in the flower because it is needed to tempt the flower or the fruit, but for no other purpose than to tempt the bee to brush its hairy legs against the anthers and carry the pollen dust from one flower to another. So the horticulturist cannot but look upon the bee as his friend, and certainly the horticulturist is a friend to the bee and beekeeper. What then is to hinder these two vocations going hand in hand, since each is helpful to the other? They should at least be on the very best of terms, as each furnishes inducements for the other to live and profit thereby.

WHAT POLLEN IS.

Pollen, or bee bread, as it is often called, is the fertilizing substance or dust in the cups of flowers; in other words, fruit in embryo.

Before pollen-bearing flowers make their appearance in the eastern countries, rye flour, corn meal and wheat flour are used as a substitute. It is used by the bees in connection with honey to feed the brood or young bees, and by the workers for elaborate wax, etc.

Pollen is one of the indispensables in rearing brood.

A bee gathers from one kind of flower at a time, although it may not be very plentiful. This is why we see the various colors stored in separate cells. It will be not only instructive but interesting to the novice to look into the hive and observe the economy practiced there.

Dairying all the Year Round.

The question as to whether the calf should come in the fall or in the spring is to be determined by the comparative profit of the summer's or winter's market.

The winter's milk costs more money, but it brings more. It costs more in shelter, and about the same in labor, and the relative price of milk fed must determine whether the calf shall come in the fall or in the spring. As farmers settle down to dairying as a business, they will more and more aim to make it an all-the-year-around business, and hence will have calves coming all the year around, with a greater proportion of fall calves than heretofore. This will give creameries permanent work, which is essential to their profit, and will bring dairying down more and more to a legitimate and profitable business all the year around.—Creamery Gazette.

Silage Milk.

I have made butter from silage milk and had it scored by experts, and none of them found anything to cause them to think of silage. I have also had samples of milk warmed to 110 degrees to 115 degrees F. and examined for flavor daily for weeks, and nothing found to cause us to think of the silo; but we had reason to think of unclean cans, the pigpen, the cow stable, and various other things which the milk had absorbed by being exposed after milking. Milk exposed in a silo in an open vessel will absorb from the silage, so that any person acquainted with the silo will know where it has been exposed.—H. B. Gurler.

Butter in Winter.

With care in making the proper arrangements, good butter can readily be made in winter, and the cost be not materially increased. There must be fresh cows. Good, warm, dry shelter, plenty of good food and water, proper arrangements for handling milk and cream so as to secure the desired temperature for cream raising and butter making, and with these essentials, good butter at only a slightly increased cost per pound can be made. But the quality must be good to make the most out of it, as the consumer demands good butter in winter the same as in summer, and the price is largely determined by the quality at all seasons.

Methods of Curing Meats.

There is not as much system about curing meat on the farm as there should be. Pork is often cured so salty that it can hardly be said to be palatable, the hams are poorly cured, and often no attempt at all is made to cure bacon. There is seldom to be found good corned beef. One reason, no doubt, for the lack of the latter is the fact that but few farmers ever kill bees on the farm, and to sell at the cheap wholesale rates, and then buy back a quarter of a beef to corn is too expensive, as the farmer has to pay the profits of the wholesale purchaser, middleman, and the retail dealer. If farmers would make the endeavor, no doubt they could find neighbors that would readily purchase what surplus of the selfsame purpose of corning. There should be more variety in meats on the farmer's table than there generally is. Dr. Galen Wilson, in his special correspondence for Farm and Home, sends the following valuable recipes for curing meats. While almost every farmer has a way of his own—some good and some bad—the professional meat curers have reduced the business to a science. Their methods have been printed in a little book designed for butchers only, and it is not for sale in the bookstores. By dint of much inquiry and perseverance I have come in possession of a copy, and propose now to give to your readers herewith such formulas as I think they would like to know, believing the information will be acceptable, now that it is hog-killing time.

Salt Pork.—Cover the bottom of a barrel with an inch of salt. Pack down a layer on the edge of the pieces, with the rind next to the barrel; pack all the space solid; cover with an inch of salt, and thus proceed with the rest; when all is packed, weight it down; make a brine strong enough by boiling to hold up an egg; skim off any scum that rises when boiling. When thoroughly cool pour it on the meat and cover the meat fully. As a matter of safety, it is advisable to take all out the next spring, repack as before and reboil the brine, adding more water and salt, as may be needed. Some only turn the brine off and reboil.

To Corn Beef or Pork Hams.—One hundred pounds of meat, six gallons of water, nine pounds of salt, three pounds of brown sugar, one quart of molasses, six ounces of saltpetre; boil, skim, and let stand until cold. Dissolve the saltpetre and add to the pickle, stirring well. Pack the meat and pour the pickle over it.

To Corn Beef.—To each gallon of cold water put one quart of rock salt, one ounce of saltpetre and four ounces of brown sugar. It need not be boiled. As long as any salt remains undissolved the meat will be sweet. If any scum should rise, scald and skim well, adding more salt, saltpetre and sugar. As you put each piece of meat in the tub or barrel, rub it over with salt. If the water is warm, gash the meat to the bone and put in salt. Weight the meat down.

To Cure Hams and Beef for Drying.—For 100 pounds of meat use seven pounds of coarse salt, five pounds of brown sugar, four ounces of saltpetre, one ounce of saleratus, dissolved in water enough to cover the meat—about four gallons. Pack the meat in a cask without any additional salt and pour the pickle over it. Let it stand about six weeks, then take the meat out and smoke it. Hang the hams leg down, always, when smoking. After smoking, slip each ham into a loose muslin sack to keep flies off, and hang in a cool, dry place. Be careful that the hams are not frozen; when the pickle is put on, they will not take the salt.

The Cow-Machine.

The cow is a machine for manufacturing our coarse fodder and grain into milk. This machine requires a certain quantity to keep it in running order, and our profit comes from what she consumes after she has taken care of herself. A food may be so lacking in palatability that she will only consume enough to sustain herself, in which case our profit is a minus quantity. The question of digestibility enters into the problem, but my experience has caused me to think that palatability and digestibility go together, or at least a palatable food is a digestible food. Palatability we must have, as we cannot succeed without it. How can we secure it? With our hay, it can be attained by cutting at the proper time and curing and protecting it in a proper manner. My experience teaches me that the clovers, and especially the medium clover, make the best hay for milch cows, when cut at the proper time and well cured and secured.—H. B. Gurler.

Butter Prices and Other Prices.
The average price of butter in the New York market for July in the past five years has been 19.58 cents. The average for July in the same market this year will probably be about 15.12 cents. This is a decline of less than twenty-five per cent, while all other farm products have declined at a much larger per cent. This shows that the dairy market is one of the most vital and elastic of all. So, when creamy patrons and others get discouraged, they should ask themselves, "What else can I raise on my farm that will pay better than milk?" The great difficulty is that so many men have such poor cows that all the profits are eaten out of the business in that manner. But these low prices are driving hundreds of farmers to think and investigate, and look into the foundations of their own business.—Hoard's Dairyman.



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Emergency Directions for Relieving Choked Cattle.

Choking in cattle is usually caused by swallowing a potato, apple, piece of turnip or carrot, or a piece of corn cob. No matter what part of the gutlet it is lodged in, it causes great distress. The animal coughs, saliva runs from the mouth, eyes bulge out, back is arched and bloating also takes place. If it is in the upper part of the gutlet, the animal soon dies from suffocation. If it is in the middle or lower part, the animal may live for several days. If it is in the upper part of the gutlet, give a little oil, and then rub the hand up and down the throat to scatter the accumulation. It may be necessary to give a little oil several times, and continue the rubbing, as it may take some time to overcome the choking. In case no oil is at hand, a similar attempt may be made by pouring down some water.

If the obstruction cannot be forced up or down by oiling or rubbing the gutlet, advises the New York Tribune, use a probang, which is made of spiral wire covered with leather, and which will bend with the neck. There is also a gag to put in the mouth, with a hole in the center through which the probang passes. Oil the probang, and let one man take hold of the animal's horns or ears, while another passes the probang through a hole in the gag and back into the gutlet. Press gently until the object is felt, then by steady pressure it will pass into the stomach. Too much force should not be used in case of rupturing the gutlet. No unyielding article should be pressed down the gutlet, as it is almost sure to rupture it. If a probang is not convenient, take a piece of rope about three-quarters to an inch in diameter, frizz out a little of the end, and tie a knot around it to form a soft knot; grease this well, and it will supply the place of a probang.

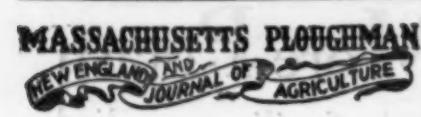
In cases where an animal cannot be relieved by this treatment, cut down on the gutlet with a knife, making an incision and removing the material. Clean the wound, and bring the edges of the gutlet together firmly with silk thread or catgut, letting the ends hang out of the external wound, bring the edges of the skin together, put a bandage around, and keep it wet with cold water for twenty-four hours, and it will usually heal. Give the animal soft food for some days, or if a probang was used and the gutlet not cut, give soft food two or three days.

Keeping Winter Apples.

S. D. Willard, a prominent New York pomologist, gives the following as his plan for keeping winter apples in the best condition:

"My practice in keeping apples in not feeding the mother properly, and the pigs get to scouring, and they are put back a whole week or more. We must feed her very lightly, and if the pigs do commence to scour give her a teaspoonful of sage or saffron in her slop; that will regulate the whole business. After the pigs are two or three weeks old provide a place for them by themselves and begin to feed them. Here again, don't make the mistake of having one of those V-shaped troughs unless you want your pigs to have long noses and to wrangle over their food and spill swill all over themselves. They want to be clean, that is their nature, but you have prevented them from being so. Let them have a little trough by themselves and have the feed near like milk as we can make it. We use olive meal and corn; I had rather use middlings than anything else, with a little olive meal. I think that is the best pig food that we can get. Make the food thin; use water, if you can't get

will not take the salt.



BOSTON, DECEMBER 19, 1896.

Persons desiring a change in the address of their paper must state where the paper has been sent as well as the new direction.

PLoughman Farmers' Meeting.

Saturday, Dec. 26-- 10 A.M.

ESSAY by W. H. TEEL, of West Acton, Subject: "Cold Storage for Farmers."

The next MASS. PLOUGHMAN Farmers' Meeting will be held in Wesleyan Hall, 36 Bromfield St., Boston, Saturday, December 26, at 10 o'clock A.M.

The subject of this meeting opens up a much-neglected branch of the market side of farming. Any one who has studied the city markets knows that much better prices may often be obtained by holding back the produce for a few days, or a few weeks, as the case may be, and the few outsiders who have facilities for storage have often made a great deal of money.

Moreover, some kinds of produce arrive in much better condition if properly cooled before shipment. Hitherto, farmers have not generally availed themselves of cold storage, because, while many of them have realized its benefits, they have known of no simple plan for home use. Mr. Teel's cold storage scheme has attracted considerable attention because of its easy adaptability to the farm, and because of the financial success of the experiment.

There are many branches of the subject which are worthy of attention, and besides the experience of Mr. Teel, it is expected that others will tell what they know about cold storage, either in the fruit room, the vegetable house or the dairy department.

All are welcome and all are invited to take part in the discussion. Remember the new place of meeting, Wesleyan Hall, Bromfield street.

The roadsides of New England are frequently in a bad condition. Now is a good time to cut away the trees and clear off the rubbish.

CATTLE Commission, State Roads and Gypsy Moth are likely to prove subjects for some discussion during the coming Mass. legislative session.

MORE intelligence, better strains of stock and of vegetable products, stricter economy of production, cheaper supplies of all kinds. The above are among the requirements with which the farmers must meet the low prices of the times.

THE farmers in the vicinity of Boston have recently contributed 4816 barrels of apples to be distributed among the needy of this city. It is estimated by the Boston Herald that 47,890 persons were represented in this distribution. Farmers are an open-handed class, whenever they have anything they can possibly spare.

It is a pleasure to meet a young man fairly in love with farming; one who chooses the occupation because he loves to see animals thrive and crops grow luxuriantly; one who, in short, thinks of the solid satisfaction he is getting, rather than of the dollars he makes. Such are not likely to leave the country and chain themselves to a city desk. They are farmers, born and bred.

AUGUST Post, secretary of the National Farmers' Alliance, is mentioned as successor to Secretary Morton as the head of the Department of Agriculture. Other candidates are Grand Master Brigham of the Grange, Ex-Gov. W. D. Hoard of Wisconsin, and "Farmer" Allerton. New England's favorite candidate is W. W. Rawson of Arlington, whose large ability, energy and practical experience have been urged by his friends as constituting special fitness for such a position. The Massachusetts delegation in Congress have been asked to further Mr. Rawson's interests.

FARMERS in discussion often find numerous points of disagreement of opinion. But they seem quite unanimous in the statement of the lack of much profit in the operations of the past season. Dairy products, vegetables, hay, apples, the leading staples of New England farming, have all ruled extremely low. Even the milk market, which is usually a malady as a producer of tolerably good cash returns, has been in a more unsatisfactory condition than ever before. The growers of small fruit, cranberries excepted, seem to have done as well as any class, but even among these exists much complaint of low prices. Certainly the farmers seem free from the dangers of sudden wealth, so far as concerns the profits of this year's operations, and there are many who have felt obliged to draw upon the savings of better times in order to meet their expenses. It is commonly supposed that better times are just ahead, and it is to be hoped that this is so. Low prices for some of the crops are to be expected every year and can be endured. Low prices for all of the crops can be endured once in a while. But low prices for all of the crops all of the time are beyond even the sturdy endurance of the thrifty Yankee farmer.

STATE OF OHIO CITY OF TOLEDO, ss.

FRANK J. CHENEY makes oath that he is the senior partner of the firm of F. J. CHENEY & CO., doing business in the City of Toledo, County and State aforesaid, and that said firm will pay the sum of ONE HUNDRED DOLLARS for each and every cause of action which cannot be cured by the use of H. L. CATHARENE, CURE.

Swearn to before me and subscribed in my presence, this 9th day of December, A.D. 1896.

A. W. GLEASON,
Notary Public.

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TOPICS OF THE WEEK.
New England Agriculture.

TRUE SPIRIT OF THE FARMER AND REQUIREMENTS FOR SUCCESS.

Extract from address by George W. Atterton, LL.D., President of Pennsylvania State College, at Greenfield, Dec. 2, 1896.

SOME ELEMENTS OF SUCCESS.

There is no formula for making every man successful in any calling. There is nowhere a perpetual insurance policy against failure. The farmer must take the same chances as other men. Carefulness, intelligence, frugality and thrift will, in the absence of special calamity or disaster, invariably win success. Negligence, ignorance, wastefulness and laziness won't.

In the perpetual shiftings of modern industry the farmer has one advantage of which he can never be deprived.

All improvements in machinery operate principally to reduce the margin between the cost of producing the raw material and the cost of converting it into usable commodities. All increased facilities for transportation reduce the margin between the cost of producing raw material and other commodities and their selling price to consumers in the market.

The Union, however, will hold its annual meeting in Boston, January 7, and will attempt "a thorough and permanent organization at each shipping point to look after the milk producers' interests."

Here is what Master N. J. Bachelder of the New Hampshire Grange has said in his address given last week concerning the

MILK SURPLUS.

The milk trade of Boston is practically controlled by three men. The men buy the milk of the producer at a stipulated price with the proviso that in case the market does not require all that is sent for use as milk, the producer shall accept for three per cent or less of the milk sent what it is worth made into butter when the surplus exceeds a certain amount.

The price of milk is fixed for six months in advance, and is for milk delivered in Boston from which seven cents per can is deducted for freight within twenty-five miles of the city and one cent additional for each twenty-five miles distance beyond the first.

DISADVANTAGES.

On the other hand, the farmer is at a disadvantage, which, in the very nature of things, he can never fully overcome; he is obliged to plan his expenditure and his income largely with reference to the operations of an entire year, as far as they relate to the cultivation of staple crops.

His investment, so to speak, is made in the spring; his returns cannot be gathered until autumn; and, in the meantime, his best calculations and most wisely directed energies may fail of their expected reward through variations in world-wide conditions respecting which he can have neither foreknowledge nor control, while other producers can, in a measure, adapt their operations to conditions as they change from day to day or month to month.

SPECIAL PRODUCTS.

But, as has been already pointed out, while the New England farmer can no longer reckon himself as an equally favored producer of those staples which are subject to world-wide competition, he has exceptional local advantages of his own as the near neighbor of great industrial centers. He can produce apples of a quality and flavor not surpassed if equalled anywhere in the world, for the best of which there is always a demand at home and increasing demand abroad. He can produce poultry and dairy products for which there is a market the year round. He can by constant replacing and care keep up the standard of his orchards. He can raise an abundance of marketable hay. He can, with sure though slow profit, reforest his woodlands and waste places with valuable kinds of timber, instead of leaving them to the chance of white birch and brambles. In very many localities, he can, in addition to these, supply towns and cities and summer resorts with small fruits, flowers and vegetables according to the season. He can, if he is to be hoped, under changes of legislation once more raise wool at a profit and exclude the direct underselling of neighbors who are ready to make use of our markets but unwilling to share in paying our taxes.

A GOOD HOME, AT LEAST.

And while the returns for his laborious and exacting industry will not, in single instances, be so large and brilliant as those which come in exceptional cases to men engaged in other pursuits, I firmly believe that there is no other occupation in which a man possessing the qualities and exercising the virtues which I have named can, with an equal amount of capital, secure, on the average, so comfortable and happy a home for himself and his family, give his sons and daughters a good start in life with a sound constitution and a good education, make for himself so honorable a place in the respect and confidence of his fellowmen, and complete so fully that measure of service which every man owes to the public as neighbor, citizen and patriot.

ITEMS OF FARM NEWS.

Corn is being contracted to feeders in Kansas at twelve to eighteen cents per bushel, with an average of fifteen to sixteen cents in the cattle feeding countries. It is estimated that forty per cent of the crop will be sold at these prices before January. The number of cattle to be finished is about the same as in 1895.

A glut of apples is reported in many southern towns and cities. Northern apples have been rushed forward in very large quantities, with the result of overstocking the market.

The latest advices from Argentine are to the effect that the exportable surplus of wheat will not be over 20,000,000 bushels, when from 30,000,000 to 35,000,000 were anticipated. The crop has been damaged by insects and unfavorable weather.

The Plymouth Agricultural Society has asked permission to mortgage its property for \$6000. President Nutter says that the outlook for the society is far from discouraging, and that the prospect of the electric roads in this section of the state would bring renewed prosperity to the locality.

This is the season for the business meeting of Agricultural Societies. Most of them report a deficit and an increase in debt.

WHEN prices are low farmers should strive the harder to produce most of the food supplies on the farm.

SEAL.

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NOTARY PUBLIC.

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MASSACHUSETTS PLOUGHMAN BOSTON, MASS., SATURDAY, DECEMBER 19, 1896.

MARKETS.

BOSTON LIVE STOCK MARKET

Cattle Lower by 1- $\frac{1}{2}$ to 2c—Sheep Firm—Hogs Unchanged—Prices Sustained on Calves—Milk Cows Steady—Horse Market Shows Fair Disposals.

*Reported for Mass. Ploughman
Week ending Dec. 16, 1896.*

Amount of Stock at Market.

Cattle	Sheep	Chickens	Hogs	Veal
This week, 4,531	8,222	62,493	1,230	
Last week, 2,494	13,454	153	39,551	1,362
One year ago, 4,696	16,853	150	39,881	1,099
Horses				502
Total				4531 8222

CATTLE AND SHEEP FROM SEVERAL STATES.

Cattle	Sheep	Cattle	Sheep
Mass.	438 1905	New York ...	22
N. H.	1,170 1905	Conn.	536 1905
Vermont ...	211 1905	E. R.	22
Massachusetts	161 1903	Western ...	3341 3825
Conn.	87	Canada ...	313
Total	4,531		

VALUES OF CATTLE.

Cattle	Sheep	Values
At 10c	8,222	62,493 1,230
Last week, 2,494	13,454	153 39,551 1,362
One year ago, 4,696	16,853	150 39,881 1,099
Horses		502
Total		4531 8222

Values on Northern Cattle, etc.

Cattle	Sheep	Values
At 10c	8,222	62,493 1,230
Last week, 2,494	13,454	153 39,551 1,362
One year ago, 4,696	16,853	150 39,881 1,099
Horses		502
Total		4531 8222

CATTLE AND SHEEP BY RAILROADS, ETC.

Cattle	Sheep	Values
At 10c	8,222	62,493 1,230
Last week, 2,494	13,454	153 39,551 1,362
One year ago, 4,696	16,853	150 39,881 1,099
Horses		502
Total		4531 8222

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Values on Northern Cattle, etc.

Cattle	Sheep	Values

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THE HOUSEHOLD.

RED RIDING HOOD.

On the wide lawn the snow lay deep,
Ridged o'er with many a drift heap;
The wind that through the pine trees sung
The naked elm boughs tossed and swung;
While, through the window, frosty stars
Against the sun-set purple barred,
With a sharp, clear ring, flared by,
The hawk's gray flock shone in the sky,
The crested blue-jay, flitting swift,
The squirrel posling on the drift,
Erect, alert, his broad gray tail
Set to the north like a tall sail.
It is time to pack our little bags,
With flattened face against the glass,
And eyes in which the tender dew
Of pity shone, stood gazing through
The narrow space her rosy lips
Had made in the floor's ellipse.
"Oh see," she cried, "the poor blue-jays!
What is it that the black crow says?
The squirrel lifts his little legs
Because he has no hands, and bags,
He's asking for my nuts, I know;
May I not feed them on the snow?"

Half lost within her hood, her head
Warmed sheltered in her hood of snow;
Her plaid skirt was about her own,
She bounded down the wintry lawn,
Now struggling through the misty veil
Blown round her by the shrieking gale;
Now sinking in a drift so low
Her scarlet hood could scarcely show
Its dash of color on the snow.

She dropped for bird and beast forlorn
Her little store of dried beans,
And when the little nests became:
"Come, squirrel, from your hollow oak—
Come, bold old crow—come, poor blue-jay
Before you supper's blow away!
Don't be afraid, we all are good,
And I'm mamma's Red Riding Hood."

J. G. Whittier.

THE CHILDREN'S CHRISTMAS MONEY.

It is often a hard task for the children to earn the money they want to use in buying Christmas gifts, but one family has solved the problem in a most satisfactory manner.

They live on a farm, a few miles from a city, and, consequently, their wages must be something that can find a ready sale among city people. There are three children in the family, one boy and two girls, their ages being ten, twelve and fifteen, the boy being the youngest. His work through the spring and early summer was collecting mushrooms in the fields and pastures. There are several varieties which he collected separately, and obtained a good price for them. At first he only sold them to hotels and restaurants, but when it became known that he had them, their market was made, and private families ordered them ahead, often more than he could obtain. He intends raising them in a barn-cellar next year, as well as gathering those in the fields.

The younger girl goes to the woods and digs ferns, bringing each root in a ball of its own favorite leaf-mold. These lovely ferns are in demand in the city, and good prices can be obtained for them. Several are often dug before being ordered, and she plants them in shallow, wooden boxes, where they grow until sold. She carries them to her customers in the boxes, and brings them home empty ready for another supply. She sets the ferns out for her customers without extra charge, and, by doing so, often makes a success of the planting when otherwise it might be a failure. The child being among them so much, knows better than any one else the way they should be planted, the proper soil and location.

The older girl makes cottage or Dutch cheese, and has had good success with it. She uses either sour or buttermilk for the purpose, and, instead of putting it on the market flat and tasteless, with simply the curd and a little salt, she seasons it nicely with butter and sweet cream. This gives her the advantage over others, and her cheese is always in demand. These young people do not have much trouble in working up a trade, as one person tells another, and so on, so that their goods sell themselves.

It is harder for city children to earn money, but one little twelve-year-old girl has succeeded in earning several dollars by making doll hats and bonnets. The hats are made from felt pressed into the proper shape, trimmed with odds and ends of ribbon, tiny flowers and feathers, for winter use, or from straw sewed, pressed, trimmed with flowers, lace or ribbon for summer wear.

I must explain her way of pressing the felt into the desired shape, as some other little girls may like to make some. She takes a piece of felt and cuts it round, making it a little larger than the hat needs to be when completed, as the crown will take up some of the size. The centre of the felt is wet, and is placed over a form that will make it the proper size and shape. It is then pressed into perfect shape with the fingers (which is easy when the material is wet) and then a warm flatiron is used to dry it. Pressing, when wet, will stiffen the crown so it always keeps its shape. The size depends on the doll it is to be used for, and the little maiden uses anything from a thimble to a teacup to press the crown on. For a Tam o' Shanter a separate crown is made and sewn on. When it seems necessary to stiffen either felt or straw hats, a wash of this glue water is used on the wrong side.

Friens keep the child supplied with scraps of silk, felt, ribbon, fancy straw and flowers, so that her stock in trade has cost her nothing. She uses fine wire for the edge of straw hats, and to stiffen the loops and bows of ribbon, and displays much taste in her work. The prices range from three to fifteen cents, according to size and quality of

the hats, and her reputation as a milliner is now made, so that the children come from far and near to buy her wares.

A little cousin in California, where English walnuts grow, formed a plan for earning money, and succeeded. She selects the most perfect nuts, cracks them in half and removes the kernel. When several are ready she pours partly melted bees-wax in the halves, presses two halves together, leaving a small crack at one end. They are intended for use in waxing a thread, and the crack is left in order to reach the wax. When the shells are being filled, a loop of baby ribbon is placed in the top where it adheres to the wax, and is used to hold it by. Afterwards the shells are painted with gold, silver or bronze paint, and she sells them to tourists who wish to carry home souvenirs of the place.

It gives the children confidence in their own ability as well as the comfort of buying something with their own money.—Household.

A HARD-TIMES DIET.

"I wish we could have beefsteak, and oysters, and canned salmon, and potted broths of all sorts," said Mrs. Meader to Mrs. Coombs, whiningly, "potted things are so much better and appetizing than what you make yourself. Times are so hard it seems as if Reuben can't get much price for what he carries to market, and half the time he brings back almost the whole load. Oh, dear me! I shall be glad when the country gets right again, somehow, if only for the sake of us women, who must cook through it all without enough to do with."

Mrs. Coombs laughed. "Did you know," she said, "that those are the best beans in the market? I know folks in the city who buy them in preference to the others. And the price is about half as much. Boil them in one water half an hour. Then drain and boil a long time in another water till they are soft. Then press through the sieve, leaving the skins all in the sieve or colander. Mix the pulp with the rich milk, bring to a boil, add salt and butter, and you have the richest and nicest soup you ever saw, just as thick as cream, and exactly the color of chocolate. Don't put too much on the table the first time—well, I needn't say that. There can't be too much of this. And there are the turnips. I slice them thin and fry, for change, to a golden brown. Then I bake them like a peeled potato. Why, I fairly envy the cow her turnips, only I am so full of this sort of a hard-times diet that I have no room for more. Of all the people in the world, farmers can't afford hard times best. Potato pies, and turnip pies, and carrot croquettes, and parsnip lady fingers! Be sure to disguise everything that is common and plenty, and in place of a hard-times diet, with long faces around the margin, we shall have a good-times diet, garnished with merry faces. I must run; I left the sweet potatoes cut in long, thin strips in the oven to bake. When they are done, I shall pile them up like a cob house or a log cabin, and the children will forget there are two tons of them in the cellar."—Table Talk.

bread crumbs or hash seasoned with curry powder. Curry powder is such a handy thing to have in the house. A bottleful, worth a few cents, will last a year, with just a dash for flavor, either in hash or soup. I can't begin to tell you all the ways I cook potatoes, and I am thankful every day that we farmers have potatoes to fall back on. And we have more butter to use in dull times. And eggs don't bring much price in the market, but they are so good in the pantry. With a basket of eggs, some butter, some salt pork, and corned beef, and corn meal, with a little sugar or molasses, a farmer's wife can bid defiance to hard times. And there are all the rest of the vegetables we have, and the poultry. A farmer's life is the life for me. There is always a home market for it all, if you take my advice and not cook too much of anything. Be sure there is never any left on the table. It is a fault with us farmers' wives; we cook too much of everything. There being a good deal, of course we don't think. Just think of the cabbage headed up on a platter. No wonder the boys get tired of the sight of it; but put a little on the table, just enough to whet the appetite. It is the secret of a hard-times diet, and a secret other folks besides farmers' wives ought to know. If there is enough price for what Reuben can't get much price for what he carries to market, and half the time he brings back almost the whole load. Oh, dear me! I shall be glad when the country gets right again, somehow, if only for the sake of us women, who must cook through it all without enough to do with."

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To the children, Christmas is hardly complete without a Christmas tree, and the extra work involved is amply paid for by the delight of the little ones. These directions for trimming a Christmas tree from Good Housekeeping will help in this work.

A simple receptacle for the tree is an ordinary wooden water-pail in the top of which is fitted the head of a barrel with a hole cut through the centre sufficiently large to admit the tree. The pail should be two-thirds full of sand, and this is kept well moistened the tree will remain fresh and green, thus avoiding the shedding of needles as well as lessening the danger of fire. In trimming a tree, begin at the top. Pop corn is a popular trimming for a tree, but this is much prettier and more effective when pinned to the tree than when strung as is usually the case. It requires more labor, but the result is very gratifying. Get the white pop corn and seven slivers of the cheapest pine. Put a pin through each kernel of the pop corn and pin it directly into the tips of each branch and twig of your tree. When finished, your tree will look as though covered with snow, and will present a fine appearance without any further decorations. Cranberries, or colored candies strung are pretty to wreathe about the main stalk of the tree its entire length. Now come the ornaments. To begin with you want a pretty top piece. A beautiful ornament should be selected for this conspicuous position, and can be purchased in various designs with openings at bottom (which the crown can be made to fit) at from ten cents upward. A real pretty one would probably cost from fifty cents to a dollar, but this can be made to last for years with care.

Out of crepe paper and some tinsel a quantity of pretty paper dolls can be made to delight the hearts of the little girls, and perhaps an Indian or a "Li Hung Chang" could be made for their brothers, while pretty boxes filled with candy will be acceptable to all the members of the family, and can all be easily made.

English walnuts, bronzed or silver leaf or even tin foil, look pretty when tied to the tree with ribbons or colored twine. Pretty thumbtacs can be made from the nuts which could be placed on the tree and answer as gifts.

Candy canes and baskets, as well as the fancy cornucopias filled with candies, look well and will prove appetizing to the little people when the tree is stripped. Pretty stockings can be made of coarse brasses net. They are quickly made, as all can be cut out at once and simply put together with a coarse buttonhole stitch all around the edge, with various colored worsteds. Boston Cooking School Cook Book.

Walnut Candy.—Two cupfuls of white sugar, one scant cupful of cold water, butter the size of an egg. Boil without stirring until just ready to candy. Have prepared the dates with the stones removed. Place them in rows, a space between each date, on a buttered plate. Pour the hot syrup over them. When nearly cool cut into squares, a date in each. Nuts and raisins and figs may be treated in the same way, and are very good.

Vinegar Candy.—Put two tablespoonsful of butter into a kettle and when melted, add two cups sugar and half a cup of vinegar. Stir until the sugar is dissolved and occasionally afterwards.

Boil until when tried in cold water, the mixture becomes brittle. Turn out on a buttered platter to cool. Then pull and cut the same as for molasses candy. Boston Cooking School Cook Book.

Peanut Nougat.—Shell, remove the skins and chop finely one quart of peanuts. Sprinkle over one-fourth teaspoon-salt. Put a pound of sugar into a perfectly smooth granite saucepan, place it on the range and stir constantly until it

around the top acts as draw string. Fill with brightly colored candies and they will make a pretty and inexpensive adornment to your tree. In placing articles upon the tree remember to put the light ornaments nearer the tips of branches and the heavier ones further in.

Small red apples (Christmas apples)

are melted to a syrup, taking care to keep the sugar from the sides of the pan. Add the nut meat, pour at once into a warm buttered tin, and mark in small squares.

If the sugar is not removed from the range as soon as melted, it will quickly caramelized. —Boston Cooking School Cook Book.

Sultana Caramels.—Put a quarter of

grease, dissolve one can of Babbit's tin, in a quart of either hot or cold water. If in hot water, wait until it becomes lukewarm before adding the grease. Dissolve a half pound package of powdered borax in a little water and add. Stir well so as to combine thoroughly all the materials. A small wooden keg or tub is the best to make it in.

and was given me by one of that happy fraternity.

Economy in every detail is the practice at the Boston Cooking School, and following out this principle, all waste fat is carefully saved, tried out and clarified and made into soap. Here is the recipe used, as given at a recent lesson.

Hard Soap.—For five pounds of

grease, dissolve one can of Babbit's tin,

and follow out this principle, all waste

fat is carefully saved, tried out and clar-

ified and made into soap. Here is the

recipe used, as given at a recent lesson.

Brown Betties.—Two cupfuls brown

sugar, one-half a cupful of milk, boil

about four minutes, stirring constantly;

when almost done, stir in three-quarters

of a cupful of chopped walnuts or chop-

ped blanched almonds; remove from the

fire, and stir till it grains and looks

sugary, then pour into a well-oiled tin to

the depth of half an inch. As it cools,

mark off in squares with a knife. This

is very nice and easily made.

Caramels, No. I.—Put a small amount

of butter into a smooth saucepan, and

when melted, add one cupful of milk,

one cupful of sugar, a cupful of grated

chocolate and one cupful of molasses.

As soon as it boils and strings like can-

dies, pour into a buttered tin, eat into

squares and let cool. This should not

be allowed to boil hard, only gently.

Caramels, No. II.—Put a piece of

butter about half the size of an egg into

a saucepan. Add half a cup of molasses,

half a cup of milk, one cupful of sugar,

quarter of a pound of grated chocolate and half a teaspoonful of flour. Let it boil hard until it strings, then turn into a buttered pan, cut in squares and cool.

Fudge.—Materials: Butter the size of

an egg, one cup of sugar, one square, or

even less, of chocolate, sufficient cream to

moisten. Let boil ten minutes, or

until the candy sugars around the edge.

This is a favorite with Wellesley girls,

You hold tight! through the heat
Ev'n in the best orchard garden
Unauthorized, your smiling lit-

The gardener—mind—will—say—
And east you forth to share our bloom!

Your daring qualities, your lit-

Meantime—ah, yes! the stars—
And gold the light, and diamonds—
You laugh and courtesy—
You dream yourself a right bloom!

The sun loves you, you think—
He never scorned you for a moment—
The green-gold flies rest on you—
It's only cross old gardeners—

You know, you weep, I suppose—
I am a weed myself, and I know—
Both, just as long as we grow—
Let's sniff at the old gardeners—

OUR HOME

A WORD TO A V

You hold tight! through the heat

Ev'n in the best orchard garden

Unauthorized, your smiling lit-

The gardener—mind—will—say—

And east you forth to share our bloom!

Your daring qualities, your lit-

Meantime—ah, yes! the stars—

And gold the light, and diamonds—

You laugh and courtesy—

You dream yourself a right bloom!

The sun loves you, you think—

OUR HOMES.

A WORD TO A WEED.

You belt thing! thrusing 'neath the very nose
Of her fastidious mystery, the rose,
In unauthorized, your smiling little head!

The eartheness—smile—will come in his big boots
And draw you up by your rebellious roots.

Your darling quelled, your little weed's life done,
And when the moon cools and the sun drops low,
He'll come again with his big wheelbarrow
And trouble you—I don't know clearly where
Over all outside the dew, the light, the air—
Mention—ah, yes! the air is very blue,
And gold the light, and green the dew—
and you are gay—ah, so exceedingly gay!

You argue in your manner—a weed, ~~weed~~,
You don't make yourself grow from a seed;
You fancy you're a claim to breeding-room,
You dream yourself a right to breathe and
blow.

The sun loves you, you think, just as the rose;
He never soiled you for a weed—he knows,
The green-gold flies rest on you, and are glad;
These old cross gardeners find you bad.

You know, you weed, I quite agree with you;
I am a weedy myself, and I laugh too—
But, just as long as we can shun his eye,
Let's sniff at the old gardener trudging by!

—McClure's Magazine.

BLACK CROWS.

He had never heard of the "enthusing of humanity"—the expression was not in fashion in his day, and if it had been, I doubt whether he would have understood it; for he was only an Australian stockrider, a "Sydney cornstalk" born, who had never read a book in his life except the Bible, and perhaps not very much of that, and was more familiar with bush craft and horsemanship than with abstract principles of any sort. Yet, if actions prove anything, the thing which that famous phrase has come to stand for was not altogether unknown to him.

It was in Van Dieman's Land—we hadn't heard of Tasmania in those days—that I made Jack Hepburn's acquaintance. At that time he was in the employ of my friend Allardye on the Echuca plains, and had been so for about two years—the only free stockman on the run. Allardye—himself one of the first settlers that ever stepped—had unbounded confidence in him, and looked to him as a sort of shean-an-hor in the midst of the endless troubles and annoyances arising out of a supply of convict labor. He was a tough, muscular, black-bearded fellow, a trifle over six feet, and fairly good-looking; active in his movements, but slow and very sparing of his speech, and not particularly remarkable for anything unless it were his scrupulous honesty and strict truthfulness.

I had left the colony when the incident happened which I am about to relate. I heard various accounts of it afterward, and the substance of them, as nearly as I can give it, is pretty much as follows:

There were four of them in the bush at the hut known as "Dicey's" one clear January evening. Dicey, the hut-keeper—a grizzled old sinner, popularly reported to have been one of the first arrivals in Sydney, though I have reason to believe that this is incorrect—was busy cooking inside, Jack Hepburn sat on a stump a little way from the door, plaiting a new lash for his whip; and the other two—handsome both of them, and of a pretty bad type—lounged in the doorway, chewing tobacco and carrying on a low conversation.

Then Jack Hepburn leveled the rifle that had never missed fire yet, and without speaking a word, shot Hawk Williams through the heart.

He had taken the dead man up and laid him in his bed-place inside the hut, unhelped by the others, who seemed struck dumb with consternation and perplexity. Old Dicey, the cooler of the two, was fairly puzzled as he vainly searched his memory for a parallel case. Both kept outside the door, stealing uneasy glances every now and then at the silent man who sat, with his head in his hands, beside what had been Hawk Williams, as though they thought he might suddenly rise and kill them too. But he never moved, and as the dusk stole up and the air grew damp and chilly, they were fain to turn in and seek their blankets.

"Mates," he said "when does Allardye come round? Is it tomorrow?" They looked at each other and muttered "Yes."

"All right," he answered, then returned to his brooding watch, and they found him still seated when they awoke in the morning.

He stayed at the hut all day.

"You chaps might think I wanted to cut you on," he remarked, "but I want to be on hand when he comes. You can tell him what you please."

"Hepburn, what's this?"

"It's quite true, sir," said Jack, quietly.

"Come along;" and he led the way into the hut.

Old Dicey met them in the doorway with a high-pitched and voluble story about a quarrel, in which Hawk Williams had not been to blame; but Allardye pushed past him and stood with Hepburn beside the dead man.

"Do you notice that?" he asked, when we were out of hearing distance of the others. It had struck me before that the van was swaying more than usual—and it was rickety enough, in all conscience, on ordinary occasion—but I only set it down to our driver making up a little lost time.

"We are traveling at a great pace," I answered.

"At a dangerous pace," was the reply as the van gave a lurch that almost threw us off our feet. "That's the first curve on the level," he added. "Just try if you can make out the engine's right."

I tried my best, but it was useless. The night was intensely dark, and to add to the difficulty, blinding blasts of snow and sleet drove full in my face as I leaned with half my body outside, seeking to catch a glimpse of light ahead.

"We must spike the back road points. It may send them into the river, but it must be risked." The spike was driven home, and the bullet had torn its jagged course from back to breast.

"I shot him straight," said Jack, as if to himself. "He didn't have to suffer that."

But Duncan Allardye turned his white face away and leaned his hand heavily on Jack's shoulder.

"That's not all," said Jack, looking at him narrowly, "but—"

"Go on," said Allardye.

They went to a spot where there was an opossum-skin rug spread out on the grass; and Jack Hepburn lifted it and showed a dead woman—a slight-limbed creature, scarcely more than a girl—with a child in her arms.

"There!" he said hoarsely. "He knew that; he could see it well enough from where we stood. And if it were to do over again I'd do it. And if it's hanging—why, I'll hang."

Duncan Allardye turned to him and took both his hands.

"God help us both, Jack!" he cried.

"I think you're right."

"How will you stop it?" sneered Williams. "There's no law agin the killin' of black crows, is there? Merediton on

the Tamar was glad enough to have 'em picked off, and so will Allardye be, for that matter."

"I know better'n that," said Jack Hepburn, and finished his w.^h reflectively, without lifting his eyes, for his soul was stirred within him. He knew that the man's words were on the whole perfectly true—that he had no force of law or public opinion to back him; that he had no authority over these men to compel them to refrain from such a deed should they wish to do it; that Allardye, who felt sure, would be his side, was miles away at the station, and that he had heard Allardye's partner, Keary, treat such things as the merest trifles. And as he thought, the slowly smouldering fires of his disgust and indignation burnt through their embers and leaped into words. "I don't know," he said slowly, looking full in "Hawk" Williams' evil face, "I don't know about the law and what folks think; but I do know this, that if I saw a chap doin' as you said just now, firin' on them poor helpless critters, women, kids and all, for pure sport, I'd shoot the fellow where he stood."

"I'd like to see you," laughed Hawk. I always knew you were mean-spirited, but you'd never dare that. I've a good mind to try. Hallo!"

Jack Hepburn turned and followed the direction of his eyes. His own, trained to the bush, at once detected the slight movement in the shrub, and knew what caused it. Williams had turned into the hut.

"Look, Hawk!" said Cass, the other convict, who had not as yet spoken, seeing him come out again with a loaded gun in his hand. "Sh! over there!"

"So it is," said Hawk, taking aim. Jack Hepburn's rifle lay beside him; he took it in his hand and stood up.

"Hawk Williams, I give you fair warning. Put that thing down—Not for you, you cantin' snuck. You darstn't shoot a white man. That's a hangin' matter."

His voice choked with the sob in his throat, but the loving clasp of arms said all that words could not.

"He said I had no right—"

"Don't you believe it! God is greater and juster than he! Oh, Jack, my boy!"

"There, they're coming. You'll have to go."

"Good night—good-by. Don't forget I'm thinking of you to the last."

"Don't fret yourself about me—don't, Good-by, Allardye. God bless you!"

The key turned in the lock and the door swung on its hinges, letting in a broad band of light from the turnkey's lamp.

"Time's up, sir."

I do not judge him; I have only told his story.—Waverley Magazine.

Upon a mountain height, far from the sea, I found a shell.

And to my listening ear lonely thing

Ever a song of ocean seemed to sing,

Ever with echoes of ocean seemed to tell.

How came the shell upon that mountain height?

I can say Whether there cast when Ocean swept the land,

Or the Eternal had ordained the day?

Strange, was it not? Far from its native deep,

One song it sang—

Sang of the awful mysteries of the tide,

Sang of the misty sea, profound and wide—

Ever with echoes of ocean ran.

—Engene Field.

A BROKEN COUPLING.

"I want to speak to you a moment, Jim. Come to th' other end of the van. Better for these not to hear us," said my mate, indicating by the direction of his glance our two fellow travellers.

His words were almost drowned in the noise of the train, but it was easy to see from his manner that something was amiss. We were together in charge of a train of twenty-four wagons running from E mfield colliery down to the main line. I was the underguard, and consequently subordinate to Frank Applegarth. His daughter, a lass of about eighteen, and a companion of his own age were traveling with us. They had missed the usual passenger train, and notwithstanding our efforts to the contrary, we had both thought there would be little harm in giving them a ride.

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Strange, was it not? Far from its native deep, One song it sang—



A cream of tartar baking powder. Highest of all in leavening strength.—*Lates United States Government Food Report.*

ROYAL BAKING POWDER CO., NEW YORK.

THE HORSE.

Nancy Hanks 2:04 is in foal to Bin-gen 2:12 1-2.

Sky Pointer, brother to Star Pointer, will be in Geer's stable next year.

The little pacing mare Daisy Wilson 2:12 1-4 will probably be sent to England.

It is said that Hal Pointer 2:04 1-2 won about \$2000 on the half-mile track this year.

Ajax, son of Hambletonian 10, died recently at the age of thirty years. He was the sire of twenty-one standard performers, of which fourteen were pacers.

Trotting horses are not alone in the depreciation of values. A hackney stallion which cost \$7000 a few years ago was recently sold in New York for \$150.

The famous sire Nutwood 2:18 3-4 died at Dubuque, Iowa, December 4. Nutwood was one of the greatest sires of speed that the country has ever produced, having to his credit 115 trotters and twenty-three pacers in standard lists.

Guinevere 2:08 sold recently at Boston for \$7000. He is a bay gelding, seven years old, by Gambetta Wilkes. During the past season he lost but one race, in which he was beaten by Robert J. Frank Agan and John R. Gentry. It is thought he can pace in the neighborhood of 2:04.

Don't you believe that German Peat Moss is an economical and healthy horse bedding? Ask C. B. Barrett, 45 North Market street, to send you testimonials.

Readville Trotting Park, Mass., March 23, 1893.

S. A. TUTTLE, V. S.—DEAR SIR:—I have used your Elixir for the past ten years, in the diluted form, for a leg and body wash. I consider it the best wash for keeping horses from soring up. Horses down up with this wash are much less liable to take cold than when done up with witch hazel or any other wash I ever used.

J. H. NAY.

A Lithographic Poem.

The handsomest Calendar for 1897 which has yet appeared is the one issued by Perry Mason & Co., of Boston, publishers of the YOUTH'S COMPANION. The Calendar is in the form of a folder, ten and one-half by twenty-four inches in size, having four leaves, or panels, on each of which is the figure of a very beautiful girl lithographed in twelve colors from an original painting. The Calendar will be an ornament to any home or business office. Perry Mason & Co. give it free to all subscribers to THE COMPANION who send the subscription price (\$1.75) of the paper for 1897. The announcement of THE COMPANION for 1897 is also out and will be sent free upon application to the publishers. A glance at its pages will disclose some of the reasons why the paper has such a hold upon readers all over the country. Reading THE COMPANION regularly is almost equal to a college education.

New subscribers sending \$1.75 to THE COMPANION for 1897 will receive THE COMPANION for the remainder of the year free also. THE COMPANION's Calendar, and the paper a full year to January, 1898.

THE YOUTH'S COMPANION,
205 Columbus Avenue, Boston, Mass.

Care of Sick Cattle.

The same general principle holds in the care of sick animals that pertains to the care of the well. They must be kept comfortable. Very often the sick animal is not worth the time, care and thought necessary to restore it to health, but if any treatment is considered advisable, remember that good nursing is often the most important treatment, sometimes, in fact, the only treatment that is necessary or of any value. The comfort of the animal must be studied and promoted in every way possible. Do nothing merely out of sympathy, simply because the animal is suffering and you want to do something for its relief, but let all your efforts be suggested by good sense, and have a reason behind them. When you know of nothing that you can do to help the patient it is usually best to do nothing. Give nature a chance to co-operate with your most intelligent effort. Do not balk her efforts by interfering unreasonably. It is quite as well to be saving of your medicine. Medicine has its place and is frequently necessary, but it is an edge tool that should be handled with care. —Dr. F. L. Russell, Veterinarian, Maine State College.

Under the operation of the Vermont library law, fifty-nine towns have established libraries in the past two years, making a total of 118. Cost of books given by the state, including expenses of library commission, is about \$6,000.

Some soils are considered less likely than others to produce scabby potatoes.

The electric wires of the French railways are so arranged that they can be used for telegraphing or telephoning.

Boston Cooking School.
All ingredients mentioned in the following recipes are measured level.

SPRINGER BROS. Cloaks, Furs.

Annual Mark-Down Sale Now in Progress.
500 Washington St., Cor. Bedford St., BOSTON.

THE GRANGE.

Needham Farmers' Association.

The lesson at the Cooking School, Wednesday morning, December 16, had a Christmas flavor, being devoted to the preparation of food suitable for a Christmas dinner. Roast Goose, Potato Stuffing, Apple Sauce, Chestnut Puree, Devilled Oysters, Nesselrode Pudding, English Plum Pudding and Brandy Sauce formed the menu. For a heavy dinner, as is usually served at Christmas time, a clear soup, like the Brown Soup in last week's lesson, is most suitable.

ROAST GOOSE.—Goose is rather expensive eating as there is comparatively so little meat for the money expended.

The best goose come from Rhode Island and Massachusetts. A ten-pound goose is the best size to buy, as a heavier one is not apt to be so tender. Singe the goose, remove the pin feathers and serum thoroughly with hot soapsuds; then drain and wash with cold water, wiping carefully. A goose so oily needs careful cleansing. Stuff with the Potato Stuffing below and truss, having no strings over the breast. Sprinkle over with salt and pepper, and lay thin strips of fat salt pork over the breast, gashing the pork a little. Place the goo-e on the rack in a dripping-pan and bake two hours in a hot oven, basting every fifteen minutes with the fat in the pan. A goose is seldom floured before putting into the oven and is usually served without gravy. It is garnished with cranberries and wafer-cress, or with parsley and red roses made by curling around into rose shape thin parings from a raw beet. White roses of turnip parings may be made in the same way and give a very decorative appearance. Apple Sauce should be served with the goose and the Chestnut Pudding is also a fitting accompaniment.

POTATO STUFFING.—To two cups hot mashed potato add one and a fourth cups soft stale bread crumbs, one third cupful butter, one egg, one and a half tea-spoonfuls salt and one tea-spoonful sage. When well mixed add one-fourth cupful finely chopped fat salt pork and one onion finely chopped.

APPLE SAUCE.—Wipe, quarter, core and pare four sour apples. Make a syrup by boiling seven minutes one cupful of sugar and one cupful of water with a thin shaving from the rind of a lemon, being careful that none of the white is used or a bitter flavor will be given. Remove the lemon, add enough apples to cover the bottom of sauce-pan, wash carefully during cooking, and remove as soon as soft. Continue until all are cooked. Strain the remaining syrup over the whites of two eggs beaten until stiff. If the sauce separates in putting together, the cooking will bring it right again.

There will be no demonstration lesson given at the Cooking School Christmas week, the next lesson coming Wednesday morning, December 30, beginning at ten o'clock. The program will be Boiled Mutton with Caper Sauce, Mashed Potatoes, Tomato Fritters, Turkish Pilaf, Cheese Souffle and Cerealine Pudding. Single admission, fifty cents.

Mrs FARMER'S COOK BOOK.

The Boston Cooking School Cook Book, by Mrs Farmer, principal of the school, has been prepared and published at the earnest solicitation of many educators, as well as pupils and friends of the author, and the book is fully equal to the highest expectations of those who have been looking forward to its appearance.

CHESTNUT PUREE.—Remove the shells from large French chestnuts, cook until soft in boiling salted water; drain, mash, moisten with scalded milk, season with salt and pepper, and beat until light. Pipe lightly on a dish before serving. The shells of the chestnuts are best removed by cutting a gash on the flat side of the nut, then putting into a pan with a small amount of butter, shake over the stove until the butter is melted and the chestnuts covered over with the melted butter, then set in the oven for about five minutes. The shells, also the inner brown skin, can then be easily removed.

DEVILLED OYSTERS.—Clean, as directed in previous lessons, drain and then slightly chop one pint oysters. Add them to a sauce made of one-fourth cupful butter, one-fourth cupful flour, two-thirds cupful milk and the yolk of one egg, diluting the egg with a little of the sauce before adding. Season with salt, cayenne and lemon juice, and if liked, add one-half tablespoonful finely chopped parsley. Arrange buttered scallop shells in a dripping-pan, half fill with the mixture, cover with buttered cracker crumbs, and bake twelve to fifteen minutes in a hot oven. Garnish with parsley. These may be served instead of the fish course. If no scallop shells are at hand, the oyster shells, well scrubbed, may be substituted.

NETTELRODE PUDDING.—Make a custard of three cupfuls milk, one and one-half cupfuls sugar, the yolks of five eggs and one-half tea-spoonful salt, beating the yolks slightly, adding part of the sugar to the milk and adding the milk slowly to the rest of the mixture. Strain, cool and add one pint cream, one-fourth cupful pineapple syrup and one cupful of water. Pour over the top of the custard. This represents a good dessert.

The book is gotten up in a handsome manner, illustrated with half-tone cuts showing many dishes all prepared, and it is very conveniently indexed. It is dedicated in a graceful manner to Mrs. Sewall, the president of the Boston Cooking School. Published by Little, Brown & Co. Price \$2.00.

FASHION NOTES.

Velvet is a favorite this year, always becoming rich and in appearance.

THE BOSTON COOKING SCHOOL,

JANET MCKENZIE HILL, Editor.

JOURNAL OF

The Boston Cooking School,

COOK BOOK.

THE STANDARD AUTHORITY ON COOKING AND DOMESTIC ECONOMICS.

INTERESTING AND HELPFUL ARTICLES ON HOUSEHOLD TOPICS.

BEAUTIFUL ILLUSTRATIONS OF PREPARED DISHES.

THE BOSTON COOKING SCHOOL'S LATEST AND CHOICEST RECIPES.

PRACTICAL AND SEASONABLE MENUS.

AMONG THE CONTRIBUTORS TO ITS COLUMNS ARE MRS. MARY A. LIVERMORE, MRS. H. M. PLUNKETT, MRS. KATE SANBORN, MRS. MINERVA B. TOBY, MRS. KATE GAMMELL WEIL, MRS. FAUNIA MERRITT FARMER, AND OTHERS WORKING WITH HER.

PUBLISHED QUARTERLY.

SUBSCRIPTION 50 CENTS PER YEAR.

PUBLICATION OFFICE - 22 School St., Boston, Mass.

Profits Increased

By Attending the Next

PLoughman Farmers' Meeting,

Saturday, December 26.

Subject: Cold Storage for Farmers.

Speaker: W. H. Teel, W. Acton, Mass.

See announcement in Editorial Column.

English Plum Pudding.—Soak one pound stale bread crumbs in one cupful hot milk, one small baker's loaf

generally giving this amount of crumbs.

Let stand until cold, then add one-quarter

cupful sugar (half a cupful), the yolks of

four eggs well beaten, one-half pound raisins seeded, cut in pieces and floured, one-

Established 1827.

Comes Every Week.

THE YOUTH'S COMPANION

The Companion of the Whole Family.



NATIONAL CAPITOL, WASHINGTON.

The list of those who will contribute to THE YOUTH'S COMPANION during the coming year is, as usual, long and brilliant. It includes not only popular writers of fiction, but also some of the most eminent naval officers, travellers and explorers, men of science and statesmen.

Life and Work at Washington.

When Mr. Gladstone was Prime Minister he contributed to THE COMPANION, as did Mr. Blaine when Secretary of State. All the members of the present American Cabinet but three have written for its columns. During the coming year the following features of national work will be described by members of the national government:

EARLY DAYS OF THE POST-OFFICE, BLDG. A WAR-SHIP, WHAT THE ATTORNEY-GENERAL DOES, THE LIFE OF A SENATOR, THE LIFE OF A CONGRESSMAN,

NEW THINGS IN FRUIT CULTURE.

It was easier handled by these gentlemen and proved very interesting to the members. Mr. Stevens spoke at some length on different varieties of small fruits, and advises the spraying of all fruit trees and bushes that were attacked by their various enemies. Advising as a preventative spraying of such with Bordeaux mixture or kerosene emulsion and claiming that where acting as judge at a recent Fruit Exhibition, he could tell at a glance which fruit grew on trees that had been sprayed and which were from trees that had not.

Mr. Stevens referred to the foreign trade for apples, and claimed that a magnificent market could be developed if our farmers and shippers carefully selected their fruit and had it just as represented. Mention was made of one party in New York state who on a shipment of apples last season received net returns of over \$4.00 per barrel, while another party in our own state received something like one cent per barrel.

The program mapp'd out for the ensuing year will be for the above Club, together with a brief history of its organization, will begin in a future paper.

The speaker referred to our large foreign cheese trade of some ten years ago, which was seventy-five per cent of the cheese manufactured in this country. Three years since the trade decreased to eight per cent, and at the present time is hardly worth mentioning. This being solely on account of the large amount of poor and filled cheese which had been forced on the foreign market and sold or tried to be sold as fine quality cream cheese. At the close of his paper many questions were asked by the members present and fully answered by Mr. Stevens, Mr. Jennison, and others.

The balance of the evening was socially enjoyed by the members present and a number of solos were rendered on the violin and piano by members of the Club. A collation was then served by the host and hostess, and the company adjourned at a late hour until their next meeting, January 1st, at the residence of the President of the Club in Needham.

The program mapp'd out for the ensuing year will be for the above Club, together with a brief history of its organization, will begin in a future paper.

Stoughton Grange

Welcomed nearly 200 Patrons at the regular Monday evening meeting, on December 14. About fifty from Brookville Grange came in special car, and Easton, Sharon and Foxboro granges were well represented in the program for the evening. Some good speeches followed a good supper after most interesting initiatory exercises, a class of eight receiving the obligation. The recent "fair committee" reported a net profit of \$65.53, which sum was turned over to the treasurer. A vote of thanks was extended to M. S. Gay for flowers contributed from his Stoughton greenhouses. At the next meeting, December 28, officers for the coming year will be elected, and a list of nominations was presented. It was learned with pleasure that next year's meeting of the State Grange will probably be held in Brockton.

The program mapp'd out for the ensuing year will be for the above Club, together with a brief history of its organization, will begin in a future paper.

The German protest against the tonnage-dues reimposed by the United States, it is thought, have no effect.

Great Britain's army estimates for the ensuing year will be largely increased over the last appropriation by Parliament.

The reported assassination of General Maceo in Cuba, has aroused a storm of indignation; Spaniards say he was killed in fair fight.

Several German newspapers will be prosecuted for publishing that Bismarck made certain disclosures because the Czar had been dissuaded by high personages from visiting him.

The ambassadors of the Powers have sent a joint note to the Porte demanding the recall within forty-eight hours of the Porte's special envoy to Crete, Said-Edin-Pacha, who is accused of thwarting the reforms projected there.

It is announced that an international conference will be held in Paris in March to discuss proposals having in view the abolishing of the system by which consumers bear the burden of the bounties granted to sugar manufacturers.

An explosion occurred last week in the Moabit quarter of Berlin, in the house of the scientist George Isaac, who was experimenting with the manufacture of acetylene gas. Isaac and his three assistants were blown to atoms. It is stated that Emperor William had intended to visit Mr. Isaac's laboratory, as his experiments had attracted the emperor's attention.

A smuggling conspiracy has been unearthed at St. John's, N. F., through the seizures of contraband tobacco at Fortuna Bay. The tobacco was brought from the United States, packed in special boxes, which were intended to be concealed in lobster cases and exported to England, where the duties on tobacco are very heavy.

CURES AND PREVENTS

Coughs, Colds, Sore Throat, Influenza, Bronchitis, Pneumonia, Swelling of the Joints, Lumbar, Inflammations, Rheumatism, Neuralgia, Frosts, Chills, Headache, Toothache, Asthma.

DIFFICULT BREATHING.

CURES THE WORST PAINS IN ONE TO TWENTY MINUTES. NOT ONE HOUR AFTER READING THIS ADVERTISEMENT NEED ANY ONE SUFFER WITH PAIN.

Hayday's Ready Relief is a Sure Cure for Every Pain, Sprains, Bruises, Pains in the Back, Chest, or Limbs.

It was the first and is